

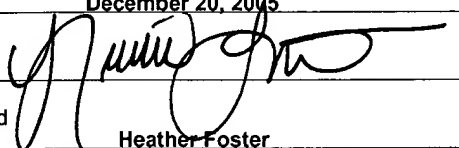
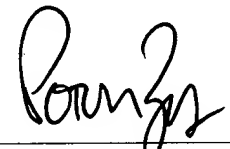


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PTO/SB/33 (07/05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 112740-315	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR on <u>December 20, 2005</u> Signature <u></u> Typed or printed name <u>Heather Foster</u>		Application Number 09/937,497	Filed September 25, 2001
		First Named Inventor Bernhard Raaf	
		Art Unit 2645	Examiner Allan Hoosain
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the			
<input type="checkbox"/> applicant/inventor.		Signature	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		Peter Zura	
<input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>48,196</u>		312-807-4208	
		Telephone number	
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		December 20, 2005	
		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Bernhard Raaf  
Appl. No.: 09/937,497  
Conf. No.: 2083  
Filed: September 25, 2001  
Title: METHOD OF CONTROLLING THE TRANSMITTING POWER OF A  
MOBILE RADIO TELEPHONE SYSTEM AND CORRESPONDING MOBILE  
RADIO SYSTEM  
Art Unit: 2645  
Examiner: Allan Hoosain  
Docket No.: 112740-315

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

This request is submitted in response to the Final Office Action dated June 20, 2005. This request is filed contemporaneously with USPTO form PTO/SB/33, "Pre-Appeal Brief Request for Review" and form PTO/SB/31, "Notice of Appeal."

**Remarks** begin on page 2 of this paper.

### REMARKS

Claims 1-32 are pending in the present application. The claims were not amended pursuant to this request, and none have been made subsequent to the mailing of the final office action dated June 20, 2005. Claims 1 and 30 are independent claims and are the focus of the present request.

Claims 1 and 30 were rejected under 35 U.S.C. §102(e) as being anticipated by *Kobayakawa et al.* (US Patent 6,064,338). Claims 2-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kobayakawa et al.* (US Patent 6,064,338) in view of *Scherzer* (US Patent 6,347,234). Claims 4-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kobayakawa et al.* (US Patent 6,064,338) in view of *Scherzer* (US Patent 6,347,234) and further in view of *Teder et al.* (US Patent 5,544,156). Applicant traverses these rejections. Favorable reconsideration is respectfully requested.

Specifically, the cited art, alone or in combination, does not teach or suggest, among other things, “adjusting the transmitting power at the transmitter in dependence on the power control information item [generated on the basis of the estimated transmitting power needed],” “estimating the behavior of the transmission channel,” and “estimating the transmitting power needed based on the result of the estimation of the behavior of the transmission channel” as recited in claim 1 and similarly recited in claim 30.

*Kobayakawa* discloses control of adaptive array antennas (AAA) where a searcher (3) searches for chip synchronization timings and delay-time adjustment data by a correlation operation using matched filters, obtains a correlation signal from the signal received from each antenna element, and calculates a vector and a matrix necessary to perform adaptive control of the antenna using the correlation signals and inputs the vector and matrix to the adaptive weight calculating unit 4 (col. 6, lines 37-45). The adaptive weight calculating unit 4 calculates adaptive weights from the entered vector and matrix and a beam former 5 applies amplitude control and phase rotation control based upon the calculated weights to the signals of the selected paths prior to despreading, combines the results and outputs the resulting signal to the Rake receiver 6. As a result of this operation, the path arrival direction of a user signal is estimated from the correlation

signals and the signals received by each of the antennas are multiplied by the weights at arbitrary times in such a manner that the antenna beam is pointed in the direction estimated from this information, thereby pursuing the user (col. 6, lines 45-57). Thus, *Kobayakawa* does not adjust the transmitting power at the transmitter in dependence on the power control information item, but instead makes adjustments to the transmitting direction of the antenna.

Regarding the Examiner's comments in the Response and Advisory Action, Applicants respectfully submit the analysis is incorrect. It cannot be said that the feed-forward adaptive weighting of *Kobayakawa* (col. 3, lines 59-61; col. 7, lines 47-51; col. 11, lines 59-64) has any kind of predictive quality to it. Applicants reiterate that predictive control (i.e., estimating the behavior or estimating power needed), as recited in the present claims, means that a future characteristic is established to build a basis for the predictive control. In contrast, *Kobayakawa* only discloses a method where successive (i.e., sequential) steps are carried out one after another (col. 9, lines 11-15) to determine an antenna direction based on currently-measured data. Based on the received data at the antennas, the data is correlated in the matched filters ME, and the antenna weights  $w$  can be calculated by the arithmetic unit and applied to form the proper beam using the same received data of the antennas as used for calculating the weights.

Also, the process of weighing and correlating signals is a concept that is separate and distinct from estimating the behavior and transmitting power needed in a transmission channel. Regarding FIGs. 12A and B of *Kobayakawa*, the disclosure teaches an embodiment where beam widths are narrowed during high-traffic conditions (determined by the amount of interference), by using phase correlation (col. 14, lines 20-50) – there is nothing in these passages that teach or suggest the use of predictive power requirements as recited in the present claims.

*Kobayakawa* does not estimate the behavior of the transmission channel as asserted by the Examiner. Particularly, FIG. 7 discloses the process executed by the searcher and AWC unit for in-phase control (col. 10, lines 60-63), where the path selector 32 directly finds the correlation signal of each of the antenna elements that has the largest power to establish a start timing for a transmission path (col. 10, line 65 – col. 11, line 6). Accordingly, *Kobayakawa* also does not teach estimating the transmitting power needed based on the result of the estimation of the behavior of the transmission channel.

Applicants also respectfully submit that the Office Action is confusing signal gain (i.e., strength or quality of a signal received from a transmitter), with power gain. Specifically, in the cited passage of col. 15, lines 29-35), *Kobayakawa* makes clear that the adaptive beam forming operates as a function of the direction of the beam in light of the interference detected in the area. By matching the phase of a correlation signal, a resultant signal may be directed to users in a more accurate manner, which, in turn, increases signal gain. However, this configuration has nothing to do with adjusting transmitter power, nor does it rely on estimates of transmitting power needed for the transmission.

As discussed above, *Kobayakawa* does not make any adjustments to the power during the minimization of interference signals, but only uses the phase of the signal, which is matched to an antenna output having the strongest signal (which in turn minimizes interference). Nothing is disclosed in *Kobayakawa* that adjusts the transmitting power.

For at least these reasons, it is respectfully submitted that the rejections under 35 U.S.C. §102(e) are improper and should be withdrawn.

The *Scherzer* and *Teder* references do not solve the deficiencies of the *Kobayakawa* reference discussed above. As *Kobayakawa* does not teach the elements recited in claims 1 and 30, it follows that the rejections for all the claims that depend therefrom must also fall. Accordingly, it is respectfully submitted that the rejections under 35 U.S.C. §103 are improper and should be withdrawn.

As such, Applicants respectfully request the panel to overturn the present rejections in light of the arguments submitted that traverse the *Kobayakawa* reference.

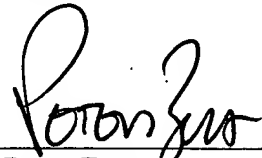
In light of the above, Applicant respectfully submits that claims 1-32 of the present application are both patentable over the art of record, and respectfully requests that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Office is authorized to deduct said fees from Deposit Account No.:

Appl. No. 09/937.497  
Reply to Office Action of June 20, 2005

02-1818. If such a deduction is made, please indicate the attorney docket number (0112740-315) on the account statement.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY 

Peter Zura

Reg. No. 48,196

Customer No.: 29177

Phone: (312) 807-4208

Dated: December 19, 2005